

L5 ANSWER 1 OF 1 CA COPYRIGHT 2009 ACS on STN  
AN 137:189133 CA  
ED Entered STN: 19 Sep 2002  
TI Manufacture of sodium silicate-based core materials  
for metal sandwich panels having good fire resistance  
IN Iwata, Hiroshi  
PA Nisshin Steel Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 6 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM C04B038-02  
ICS C04B032-00; C04B032-02; E04C002-26  
CC 56-13 (Nonferrous Metals and Alloys)  
Section cross-reference(s): 57, 58

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2002241185	A	20020828	JP 2001-34371	20010209
PRAI JP 2001-34371		20010209		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2002241185	ICM	C04B038-02
	ICS	C04B032-00; C04B032-02; E04C002-26
	IPCI	C04B0038-02 [ICM, 7]; C04B0032-00 [ICS, 7]; C04B0032-02 [ICS, 7]; E04C002-26 [ICS, 7]
	IPCR	E04C0002-26 [I,C*]; E04C0002-26 [I,A]; C04B0032-00 [I,C*]; C04B0032-00 [I,A]; C04B0032-02 [I,A]; C04B0038-02 [I,C*]; C04B0038-02 [I,A]

AB The process comprises: adding 3-30 weight parts of boric acid  
and/or 10-100 weight parts of Al hydroxide to  
100 weight parts (solid portion) of #3 sodium  
silicate, stirring and heating to form a gel-like  
material, and placing in a container for foaming at 160-300° until  
the sodium silicate have the d. of 0.1-0.9, where the  
d. is calculated based on the formula of:  $(Msn-Mt)/(V+1000)$  (V is the  
volume of the foamed body, Msn is the weight of the foamed body, and Mt is the  
weight of the additive before foaming).

ST foamed sodium silicate core metal sandwich panel fire  
resistance

IT Fire-resistant materials  
(manufacture of sodium silicate-based cor